A-550 ♦ Appendix Tables

Appendix table 8-10. Mean score on Index of Scientific Construct Understanding, by selected characteristics: 1999 (Mean index scores)

All adults	58	
Formal education		
Less than high school	44	
High school graduate	58	
Baccalaureate	74	
Graduate/professional	80	
Science/mathematics education ^a		
Low	48	
Middle	64	
High	79	
Sex		
Male	65	
Female	52	
Attentiveness to science		
or technology ^b		
Attentive public	69	
Interested public	61	
Residual public	53	

NOTES: The Index of Scientific Construct Understanding is a composite measure of the public understanding of scientific terms and concepts. In 1999, this measure included responses to the following true and false questions: "All radioactivity is man-made"; "Electrons are smaller than atoms"; "The earliest humans lived at the same time as the dinosaurs"; "The continents on which we live have been moving their location for millions of years and will continue to move in the future." The following short-answer items were also included: "Which travels faster: light or sound?"; "Does the Earth go around the Sun, or does the Sun go around the Earth?"; "How long does it take for the Earth to go around the Sun: one day, one month, or one year?" Coded verbatim responses to openended questions were also included. "Please tell me, in your own words, what is DNA?"; "Please tell me, in your own words, what is a molecule?"; and "Please tell me, in your own words, what is radiation?"

^aRespondents were classified as having a "high" level of science/ mathematics education if they took nine or more high school and college science/math courses. They were classified as "middle" if they took six to eight such courses, and as "low" if they took five or fewer.

bTo be classified as attentive to a given policy area, an individual must indicate that he or she is "very interested" in that issue area, report that he or she is "very well informed" about it; and be a regular reader of a daily newspaper or relevant national magazine. Citizens who report that they are "very interested" in an issue area, but who do not think that they are "very well informed" about it, are classified as the "interested public." All other individuals are classified as members of the "residual public" for that issue area. The attentive public for science and technology combines the attentive public for new scientific discoveries and the attentive public for new inventions and technologies. Any individual who is not attentive to either of those issues but who is a member of the interested public for at least one of those issues is classified as a member of the interested public for science and technology. All other individuals are classified as members of the residual public for science and technology.

SOURCES: National Science Foundation, Division of Science Resource Studies (NSF/SRS), NSF Survey of Public Attitudes Toward and Understanding of Science and Technology, 1999 (and earlier years). For a complete set of data from the survey, see J.D. Miller and L. Kimmel, Public Attitudes Toward Science and Technology, 1979–1999, Integrated Codebook (Chicago: International Center for the Advancement of Scientific Literacy, Chicago Academy of Sciences, 1999); and unpublished tabulations.

See figure 8-5 in Volume 1.